REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1-4 and 6-13 are pending in this application. No claims are amended and claim 5 has been cancelled. Claims 1 and 11 are the independent claims.

Claim Objections

Claim 5 is objected to because the Examiner states it is not clear whether "a compressed gas: in claim 5 is identical to "a compressed gas" in claim 1.

Applicants have cancelled claim 5, rendering the claim objection moot. Therefore, Applicants respectfully request that the Examiner withdraw the objection to claim 5.

Rejections under 35 U.S.C. § 102

Claims 1-13 stand rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Perez et al. (U.S. Patent No. 6,468,451). Applicants respectfully traverse this rejection for the reasons detailed below.

Claim 5 has been cancelled so therefore, the rejection of claim 5 is now moot.

Independent claims 1 and 11 recite "introducing a compressed gas in a supercritical phase or a liquid or vapor phase approaching the supercritical phase <u>as an annealing medium</u> into the chamber <u>and annealing the amorphous polymeric optical element</u>". Example non-limiting embodiments of this feature are discussed throughout the specification. Perez, as relied upon by the Examiner, fails to anticipate or suggest introducing a compressed gas in a supercritical phase or a liquid or vapor phase approaching the supercritical phase as an annealing medium into the

chamber and annealing the amorphous polymeric optical element as recited in independent claims 1 and 11.

Referring to column 6, lines 23-26 and column 10, lines 44-46 of Perez, the Examiner states that Perez teaches introducing a compressed gas in a supercritical phase or a liquid or vapor phase approaching the supercritical phase <u>as an annealing medium</u> into the chamber and <u>annealing the polymeric optical element</u> as recited in independent claims 1 and 11. Applicants respectfully disagree.

Perez does appear to teach introducing a blowing agent in a liquid or supercritical form to a chamber. However, there is no mention in Perez of the blowing agent being introduced <u>as an annealing medium</u> to anneal the polymeric optical element as recited in independent claims 1 and 11. In fact, column 10, lines 44-46 of Perez discuss <u>an additional step</u> where the foam of Perez is further processed by annealing at a temperature sufficient to further crystallize the polypropylene. <u>In other words, the foam in Perez is annealed by an increase in temperature in a separate step from introducing the blowing agent into the chamber.</u> Therefore, the blowing agent cannot be an annealing medium as the compressed gas is an annealing medium in independent claims 1 and 11.

The Applicants, therefore, respectfully request that the rejection to Claims 1 and 11 under 35 U.S.C. §102(b) be withdrawn.

Further, an advantage of using an annealing medium under supercritical conditions or high density conditions approaching supercritical conditions is that the optical properties of a polymeric optical element may be enhanced by annealing. With such annealing, unreacted monomers remaining in the polymeric optical element may be removed, and a discontinuous or interlayer structure in the polymeric optical element may be changed into a continuous structure. In addition, the optical properties of the resulting polymeric optical element may be enhanced by

removing the residual stress. Because Perez anneals the foam structure after supercritical conditions are removed, Perez cannot provide any of the advantages of the methods of claims 1 and 11.

The Applicants, therefore, respectfully request that the rejection to Claims 1 and 11 under 35 U.S.C. § 102(e) be withdrawn for these additional reasons.

Claims 2-4, 6-10 and 12-13, dependent on independent claims 1 and 11, are patentable for the reasons stated above with respect to claims 1 and 11 as well as for their own merits.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to independent claims 1 and 11 and all claims dependent thereon.

CONCLUSION

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Erin G. Hoffman, Reg. No. 57,752, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS/PICKEY, & PIERCE, P.L.C.

Ву

John Al Castellano, Reg. No. 35,094

P.O. Box 8910

Reston, Virginia 20195

(703) 668/8000

JAC/EGH:ald